What is claimed is:

1. A compressed or uncompressed audio data feature description method, wherein

audio features are hierarchically represented by setting an audio program which means entire audio data constructing one audio program at the highest hierarchy and describing the audio features in a order from higher to lower hierarchies.

2. A compressed or uncompressed audio data feature description method according to claim 1, wherein

said hierarchies are represented by one or more audio programs having a semantically continuous content and at least either an audio scene or an audio shot.

3. A compressed or uncompressed audio data feature description method according to claim 1, wherein

said hierarchy is described by at least a name of the hierarchy, audio data type, feature type and feature value which is represented by audio segment information classified according to the feature types.

4. A compressed or uncompressed audio data feature description method according to claim 2, wherein

said hierarchy is described by at least a name of the hierarchy, audio data type, feature type and feature value which is represented by audio segment information classified according to the feature type.

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5. A compressed or uncompressed audio feature description method according to claim 3, wherein
said audio segment information are described by any
10 of time codes for start time and end time, time codes for start time and duration, a start frame number and an end frame number, or a start frame number and number of frames corresponding to duration.

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6. A compressed or uncompressed audio data feature description method according to claim 4, wherein
said audio segment information are described by any of time codes for start time and end time, time codes for
20 start time and duration, a start frame number and an end frame number, or a start frame number and number of frames corresponding to duration.

25 7. A compressed or uncompressed audio data feature description method, wherein
feature values of the audio program are represented

by an audio thumbnail indicating either one or more audio
pieces or images;

the audio thumbnail is declared and described as the
feature type;

5     if the audio thumbnail is the audio pieces, one or more
audio segment information of audio pieces are described;
and

if the thumbnail is the images, one or more file names
of the images are described.

10

8. A compressed or uncompressed audio data feature
description method, wherein

feature values of at least one audio scene or at least
15   one audio shot are represented by an audio clip which is
at least one audio piece having an arbitrary length equal
to or shorter than that of the audio scene or the audio shot,
respectively.

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9. A compressed or uncompressed audio data feature
description method according to claim 8, wherein

at least one audio clip representing characteristic
of said audio scenes or audio shots is represented as the
25   key audio clip.

10.  A compressed or uncompressed audio data feature
description method according to claim 9, wherein

the key audio clip is declared and described as a feature
type;

5      if an audio data type of the key audio clip is voice,
a voice representing characteristic of the key audio clip
is represented as the key word and the content of the key
word is described by text information; and

at least one audio segment corresponding to the key
10   word is described.


11.  A compressed or uncompressed audio feature
description method according to claim 9, wherein

15   the key audio clip is declared and described as a feature
type;

if an audio data type of the key audio clip is music,
a music representing characteristic of the key audio clip
is represented the a key note; and

20      at least one audio segment corresponding to the key
note is described.


12.  A compressed or uncompressed audio data feature
25   description method according to claim 9, wherein

the key audio clip is declared and described as a feature
type;

if the audio data type of the key audio clip is sound, a sound representing characteristic of the key audio clip is represented the key sound; and

at least one audio segment corresponding to the key sound is described.

13. A compressed or uncompressed audio data feature description method, wherein

if audio data consists of multiple channels or tracks, a representative channel or track of the audio data is represented as a key stream;

the key stream is declared and described as a feature type; and

an audio segment corresponding to the key stream is described.

14. A compressed or uncompressed audio data feature description method, wherein

audio data representing a representative event in audio data is represented as the key event;

the key event is declared and described as a feature type;

a content of the key event is described by text information; and

at least one audio segment corresponding to the key

event is described.

15.  A compressed or uncompressed audio data feature
5     description method, wherein

audio data from a representative audio source in audio
data is represented as the key object;

the key object is declared and described as a feature
type;

10     a content of the key object is declared and described
by text information; and

at least one audio segment corresponding to the key
object is described.

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16.  A compressed or uncompressed audio data feature
description method, wherein

at least one introduction or representative audio piece
of an audio program, an audio scene or an audio shot is
20     represented as an audio segment;

a sequence of the audio segments is represented as an
audio slide;

the audio slide is declared and described as a feature
type; and

25     the audio segments constructing the audio slide are
described.

17.  A compressed or uncompressed audio data feature description method, wherein

at least one introduction or representative audio piece of an audio program, an audio scene or an audio shot is saved as an audio file;

a sequence of the audio files is represented as an audio slide;

the audio slide is declared and described as a feature type; and

file names of the audio files constructing the audio slide are described.


18.  A compressed or uncompressed audio data feature description method, wherein

if feature type is one of a shot, a key audio clip, a key word, a key note or a key sound, value indicating level of the feature types is described; and

audio data for multiple feature types are described hierarchically according to the level values.


19.  A compressed or uncompressed audio video data feature description collection construction method, wherein

feature descriptions based on multiple feature types

- 3 4 -

are associated with individual audio video programs;

the feature descriptions are extracted from multiple audio video programs based on a specific feature type;

a feature description collection is constructed by
5  using multiple extracted feature descriptions; and

the feature description collection is described as a feature description collection file.


10    20.  A compressed or uncompressed audio video data feature description collection construction method according to claim 19, wherein

the feature type is a summary type;

summary descriptions associated with the individual
15  audio video programs are extracted from multiple audio video programs based on a specific summary type;

a summary collection is constructed using multiple extracted summary descriptions; and

the summary collection is described as a summary
20  collection file.


21.  A compressed or uncompressed audio video data feature description collection construction method
25  according to claim 19, wherein

as element for describing the feature description collection in the feature description collection file, the

feature types for constructing the feature description
collection and contents of the feature types are described
at a higher level; and

identifiers of the audio video programs referred to
5 by each feature description and specification of each segment
information in the audio video programs are described.


22. A compressed or uncompressed audio video data
10 feature description collection construction method
according to claim 21, wherein

if the feature is a summary of audio video data, summary
types for constructing the summary collection and contents
of the summary types are described at a higher level as
15 elements for describing the summary collection in the summary
collection file;

identifiers of the audio video programs referred to
by each summary description and specification of segment
information of each summary in the audio video programs are
20 described at a lower level.


23. A compressed or uncompressed audio video data
feature description collection construction method
25 according to claim 19, wherein

the feature types for constructing the feature
description collection and contents of the feature types

- 3 6 -

are described altogether in a nested structure, whereby the feature description collection can be constructed and described based on different feature types, or based on different contents of feature types among the same feature type.

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24.  A compressed or uncompressed audio video data feature description collection construction method according to claim 21, wherein

10     the feature types for constructing the feature description collection and contents of the feature types are described altogether in a nested structure, whereby the feature description collection can be constructed and described based on different feature types, or based on

15  described based on different feature types, or based on different contents of feature types among the same feature type.

20     25.  A compressed or uncompressed audio video data feature description collection construction method according to claim 20, wherein

the summary types for constructing the summary collection and contents of the summary types are described

25  altogether in a nested structure, whereby the summary collection can be constructed and described based on different summary types or based on different contents of

summary types among the same summary type.


26.  A compressed or uncompressed audio video data
feature    description    collection    construction    method
according to claim 22, wherein
        the  summary  types  for  constructing  the  summary
collection and contents of the summary types are described
altogether  in  a  nested  structure,  whereby  the  summary
collection  can  be  constructed  and  described  based  on
different summary types or based on different contents of
summary types of the same summary type.